



Ottawa Valley and Eastern Ontario Guideline for the Use of MRI and CT in Adult Patients with Low Back Pain

November 2019

Dear Colleagues,

As highlighted in a recent Ontario Ministry of Health InfoBulletin (Aug 2018), studies have shown that x-ray, CT and MRI for chronic low back pain are not useful tests (do not change the management or outcomes for patients) unless there are specific symptoms or signs that suggest a serious cause for the pain.

In Ontario, access to MRI and CT is limited. In an effort to maintain leading practice, and to optimize access to advanced imaging where patient need is the greatest, the regional imaging departments will only perform MRI or CT on patients with low back pain where the clinical history demonstrates medical necessity. If the clinical history on an imaging referral for patients with low back pain does not sufficiently demonstrate medical necessity of the requested study, the referral may be returned to you.

The following are examples of when, according to clinical evidence, MRI or CT is indicated for adults with low back pain.

- Suspected or known cancer
- Suspected or known infection
- Suspected or known fracture
- Radicular syndrome
- Cauda equina syndrome
- Severe or progressive neurologic deficits
- Inflammatory process
- Ankylosing spondylitis
- Previous or scheduled lumbar spine surgery
- MRI or CT recommended on previous imaging

An x-ray is typically recommended as an initial imaging study for patients with chronic uncomplicated low back pain who have experienced low velocity trauma, have osteoporosis, are chronic steroid users, or for older individuals. MRI and CT are not typically indicated for patients with back dominant pain (pain above the gluteal fold and below the T12 rib).

If you are unsure of whether MRI or CT would be an appropriate study for your patient, please submit a request for a consultation with a radiologist through the regional eConsult service under “Radiology” and subcategory “Musculoskeletal”, and indicate the consult is for “imaging for low back pain”. If you do not already have access to the regional eConsult service or for more information, please contact: econsultsupport@lhinworks.on.ca

A list of resources for physicians and for patients is attached.

Thank you in advance for supporting this patient care initiative.

Dr. Jose Aquino, MD, FRCPC
Chair, MRI Access Clinical Advisory Committee

Resources for physicians

Low Back Pain Toolkit (CORE Back Tool): This toolkit was developed to assist with the assessment and management of patients with low back pain in primary care settings. It is available from The Centre for Effective Practice at thewellhealth.ca/low-back-pain/

ISAEC Rapid Assessment Centres: Inter-professional Spine Assessment and Education Clinics (ISAEC) provides an inter-professional model of care for people that have persistent low back pain and/or related symptoms (e.g., sciatica, claudication). Locally, the program is hosted at The Ottawa Hospital and has Advanced Practice Clinicians across the region. More information is available by contacting ISAEC at info.isaec@toh.ca or at 613-789-5555 x13827. You can find out more about ISAEC on-line at www.isaec.org.

eConsult BASE: If you are unsure about whether imaging is indicated for one of your patients, please contact the regional eConsult service and reference “Imaging for low back pain” in the subject line. If you do not already have access to the regional eConsult service, or for more information, please contact: econsultsupport@lhinworks.on.ca

Resources for patients

Patient pamphlets:

Imaging Tests for Lower Back Pain: When you need them and when you don't. This pamphlet is available on-line at choosingwiselycanada.org/imaging-tests-low-back-pain/

What You Should Know About Your Chronic Low Back Pain and ***What You Should Know About Your Acute Low Back Pain***. These pamphlets are part of the Low Back Pain toolkit developed by Alberta's TOP – Toward Optimized Practice. They are available on line at www.topalbertadoctors.org

Exercise videos:

Several videos demonstrating exercises for low back pain are available on the ISAEC website at www.isaec.org/isaec-exercise-videos.html

The above list is a set of resources that may be useful for referring physicians and patients. It is not intended to be a comprehensive list of all resources that are available. Physicians are encouraged to use their own expertise and additional resources when advising patients.